

Honey bee Murder Mystery Game

As a member of the Toronto Beekeeper's Co-op I often have the opportunity to speak to people about bees. Everyone wants to know more about all the bees that are dying or colony collapse disorder(CCD) as it is more formally known. In response I've developed the Honey Bee Murder Mystery Game.

Age: 10-adult. **Time:** 30-50 minutes.

Intro ideas - 5 - 15 minutes

- Importance of pollination if not previously discussed or bees and co-operation(it's a co-operation game).
- Explain they are going to play a murder mystery game. That they will each take on the role of a character and talk to each other to discover what happened to the bees.

Hand out game cards - 5 minutes

- There are 16 game cards.
- The first page of game cards should be enough to play the game if it is a smaller group.
- Larger groups can be split into teams and compete to solve the mystery first.
- Each person should get one card. Give them a minute or two to get familiar with their character.

Playing the game - 15-20 minutes

They will then be asked to work as a group, sharing information with each other to try and solve the mystery.

Conclusion - 5-10 minutes

Have the students explain their conclusions. Explain it's a real phenomenon called CCD and answer any questions the game raises.

Solution

Groups using the full set of characters should be able to identify stress of transportation on bees, pest/diseases, queen genetics and poor nutrition for bees on monocrop farms as contributing factors, however, Nick and the pesticide company he represents should be seen as the primary culprit.

Thanks

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You are Billy the beekeeper, and these are your bee hives. You send your bees to pollinate grain crops like soybean and canola. After the bees came home they all died.



You are Kate, Billy's neighbour, and you keep bees in your back yard. After Billy's bees came home your bees seemed to have more mite parasites.



You are a solitary sweat bee. You live in a wild-flower field near the canola farm, but you never go there because there isn't enough good food for your babies.



You are a golden rod, a wild flower growing beside the canola farm. Lots of bees visited you, but some of Billy's bees seemed confused.



You are a Varroa mite, a nasty parasite of honey bees. You moved into one of Billy's hives while his bees were in the soybean field. The bees seemed too tired to scrape you off, so you sucked their blood.



You are Nick. You work for a company that puts chemicals to kill insects on canola plants. You found that your pesticides did not kill bees instantly, so you say they are safe for bees.



You are a canola plant and Billy's bees visited you when you were flowering. It's easy to remember them, because they are the only bees you saw this year.



You are a wasp who lives in Billy's bee yard. When all Billy's bees died, you wanted to go into their hives and steal the honey. The honey seemed strange, though, so you didn't want to eat it.



You're bee balm, a wildflower right on the edge of the canola field. Most of your brothers and sisters died, and you feel chemicals sprayed on the canola were to blame.



You are Ted, the canola farmer. To make a living you have to plant gigantic fields of canola and use lots of chemicals on them. You have to hire beekeepers to bring bees to pollinate your crop.



You're a bear living close to Billy's bee yard. You wanted to go in and eat the honey and the bees, but you couldn't because an electric fence kept you out.



You are a solitary cuckoo bee living close to the canola field. You visited the canola flowers and saw Billy's bees there. Afterwards you felt sick so you didn't go back.



You are Chris, a scientist. You tested some of the pollen Billy's bees collected. You found a small amount of poison in the pollen.



You're a scientist named Mary. You study queen bees. You've found that if the queen is not strong the whole hive may be vulnerable to poisons, parasites and disease.



You are Veronica, a neighbour of Billy's. You like to see his bees in your garden and have never been stung. You like the honey Billy gives you too.



You are Mai, a scientist studying water quality. You have found farm poisons in the stream running through the canola farm.